AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 4, line 25, as follows:

A method and system for analyzing performance of [[a]] an actual (or operational) turbine is provided. In one embodiment, the turbine optimizer system allows a user to evaluate the current performance of their turbine with its current configuration and the future performance of their turbine with a modified configuration. The evaluated performance may be expressed in terms of certain performance characteristics such as output, heat rate, availability, and reliability. The turbine optimizer may provide a comparison of these performance characteristics versus the performance characteristics of similar turbines. For example, the turbine optimizer may indicate the average performance of similar turbines and the best performance of similar turbines. The turbine optimizer initially receives from the user the identification of the turbine to be analyzed. The turbine optimizer then retrieves the configuration information for the identified turbine from its configuration database. The configuration database may contain information describing the configuration of each turbine that is currently installed at a customer power plant. The turbine optimizer then determines the current performance characteristics of the identified turbine based on the retrieved configuration information. As discussed below, in more detail, the turbine optimizer may determine the current performance characteristics based on actual measurements of those performance characteristics (e.g., during a precision test), based on initial performance characteristics of a new turbine adjusted to account for hours of operation of the turbine, and based on a

848411

simulation of the performance characteristics using measurements of other characteristics (*e.g.*, instrumentation readings). The turbine optimizer then provides to the user a display page that lists the actual or estimated current performance characteristics. That display page may also include current configuration information (*e.g.*, total hours of operation) so that the user can make any appropriate corrections to the information. Upon receiving from the user a request to display the future performance characteristics, the turbine optimizer calculates the performance characteristics for that turbine if various modifications are made to is configuration. The turbine optimizer may provide a graph that illustrates the current performance characteristics and the future performance characteristics with those modifications. The turbine optimizer may also calculate various financial estimates (*e.g.*, the estimated annular revenue) based on the current operating characteristics (*e.g.*, fuel cost and electricity price) of the turbine. The turbine optimizer may also allow the user to place an order to change the configuration of the turbine. In this way, the user can evaluate the performance of turbine based on accurate configuration information, can receive prompt feedback as to the performance characteristics of various modifications, can evaluate financial impact of various modifications, and can compare the performance characteristics of the turbine to performance characteristics of similar turbines.

Please amend the paragraph beginning at page 11, line 7, as follows:

Figure 8 is a flow diagram illustrating the processing of the estimate performance characteristics from design ~~memo random~~ <u>memorandum</u> component in one embodiment.

- 3 -

848411

In block 801, the component retrieves the original values of the performance characteristics from the design documentation database. In block 802, the component identifies the number of hours that the turbine has been operational. In block 803, the component retrieves the degradation factors for the performance characteristics based on the number of operational hours. In block 804, the component calculates the values for the performance characteristics from the original performance characteristics adjusted by the factor. The component then returns the performance characteristics.

848411